

THE OCCURRENCE OF THE QUOKKA IN THE SOUTH-WEST

By S. R. WHITE, Government School, Morawa.

The interesting scrub-wallaby of the South-west, known in the vernacular as the Quokka (*Setonix brachyurus*), has in recent years suffered a great eclipse in abundance. Unfortunately it has been so neglected by field naturalists in the past that a misleading impression of mainland rarity, contrasted with extreme plentifulness on some island outposts, such as Rottnest, has gained currency. This situation even led one recent writer to suggest that in past times the "physically inferior" Quokka was "driven by larger macropods from the richer land round the Swan River estuary to the poorer coastal sandhills" and so forced to the promontory which was later cut off as the islands off Fremantle (Clarke, *Journ. Roy. Soc., W.A.*, vol. 33, 1948, p. 141).

Apart from the fact that the "larger macropods" referred to, evidently the Grey Kangaroo (*Macropus giganteus*) and the Brush (*M. irma*), occupy quite distinct ecological niches and would not ordinarily enter into competition with the Quokka, the evidence points to the Quokka having been, until quite recently, an abundant creature in the fertile, thickly scrubbed coastal country from which Clarke would exclude it as a common denizen.

The first field observations on the Quokka were made by John Gilbert who worked in the South-west between 1839 and 1843. His notes were summarised by Gould (*The Mammals of Australia*, vol. 2, 1863): "Mr. Gilbert states that besides meeting with it at King George's Sound, he found it abundant in all swampy tracts which skirt nearly the whole of Western Australia at a short distance from the sea, and that at Augusta, where its native name, Quak-a, is the same as at King George's Sound*, it inhabits the thickets and is destroyed in great numbers at the close of the season by the natives. . . . Mr. Gilbert adds, that he had not heard of its being killed to the eastward of the Darling range."

The mainland distribution of the species has been only vaguely defined. Glauert (*Journ. Roy. Soc. W.A.*, vol 19, 1934, p. 32) states that it extends from the Moore River to the south coast. Troughton (*Furred Animals of Australia*, 1946, p. 199) gives Esperance as the south-eastern limit.

My earliest contact with the Quokka was as a schoolboy at Yarloop. The animals were so numerous among the low tangled scrubs adjacent to the old government railway pump house on Logue's brook that we were able to stampede them by shouting and running and jumping through the scrub from a cleared roadway, and watch the Quokkas bouncing across the open tract into scrub on the other side.

Older boys frequently referred to Tammars which were also supposed to have been plentiful in that area but I cannot recall

* The name from Perth was recorded as Ban-gup by Gilbert and Bungeup by Shortridge.

having ever seen one there. Quokkas were certainly still plentiful in this area until 1926 when I left the Yarloop school.

In 1929 I again became acquainted with Quokkas in numbers at Busselton and along the coast between Cape Naturaliste and Cape Leeuwin. As recently as 1931 it was possible to find Quokkas in numbers at any time in the low scrub between the coastal dunes and the Vasse estuary. They extended all through the low lying scrub country from the coast to the Marri and Jarrah fringes. In 1933 I camped at Canal Rocks where they were particularly numerous at that time. Four years later they were still present but not so noticeably and within a few years they had almost disappeared.

It is now some years since I saw Quokkas or heard of them having been seen in the areas where I previously knew them so well. They were remarkably fearless and curious little animals frequently moving about the scrub during the day but rarely emerging into the open places until dusk.

I have heard their sudden virtual disappearance on the mainland ascribed to the spread of foxes, to competition with rabbits and to the destruction of habitat through clearing and bushfires, but many bushmen who knew the animal well consider that these factors were probably supplementary to a rapid decline resulting from disease. It is significant, however, that on Rottnest Island the animal still occurs in very great numbers.

Between 1904 and 1907 G. C. Shortridge made an extensive collecting trip in the State on behalf of the British Museum and in his report (*Proc. Zool. Soc. London*, 1909, p. 813) he gives no indication that the Quokka was a disappearing species at that time—as was the case with the Tammar. He stated that the Quokka was "very plentiful among the coastal thickets and swamps of the South-west, not extending inland."



Quokka (*Setonix brachyurus*) photographed at Rottnest Island.

—Photo, V. N. Serventy.

Mr. W. H. Loaring, of Bickley, has given me the following notes: "In our old days at Margaret River, 1907-10, I was quite familiar with the Quokka, which was very numerous in the coastal country at that time. Also earlier, 1902-3, when we first went down there. I never saw Tammar in the Margaret River country, but we understood that they were present at Cape Naturaliste in those years. In the hill gullies south and east of Bickley the Quokka were particularly plentiful in the early 1920's, when their narrow and often covered runways went in all directions through the few chains of thick scrub bordering the streams, to which areas they confined themselves. The rabbit began to appear at that time, and the fox followed, and they dwindled away. From my notes I find a few were still present in the gullies as late as 1933-34. But it is many years now since I have seen any. In notes during a visit to the Margaret in 1933 I have one or two mentions of tracks being seen, but they were far less plentiful at that time than earlier. It is a good many years since I have been to the Margaret, but I understand they have vanished from there also.

"They appeared to shed a great deal of fur towards the end of winter, and my early notes mention the use of this by birds to line their nests, a note of August 14, 1921, on a nest of the New Holland Honeyeater being typical: ' . . . lined with Zamia wool with a covering of wallaby fur which is strewn plentifully about the ground amongst the creek-side tangles at the present time.'

"That the Quokka could swim strongly was demonstrated to us on one occasion at the Margaret River when one of the little animals, wounded in the foot and pressed by dogs, plunged into the waves and swam straight out to sea. In a few moments one of the dogs went after it and was to be seen treading water when on the crests of the waves in an endeavour to sight its quarry ahead of it. It eventually brought the unfortunate little wallaby back from a hundred yards out. Quokkas were snared and shot for food in those days, and were excellent eating."

COMMUNAL NESTING AMONG WHITE-WINGED TRILLERS AND OTHER BIRDS

By S. R. WHITE, Government School, Morawa.

One of the distinctive features of the bird nesting season in the Morawa district is its short duration. During a brief period, following the first fall of sufficient rain, life flourishes. Blossom and insects are abundant and when optimum conditions prevail the bird population is astounding in its density and in the high tempo of its activity. Then with surprising suddenness all declines.

A remarkable characteristic of the local bird population during the breeding season is the manner in which birds, not only of the same species but of different species, appear to congregate in small communities. There appears to be a tendency for birds to nest in proximity to one another. Such recognisable islands of mixed bird population have been observed to include Crimson and